

REMARKS

Claims 5 and 31 have been amended. No claims have been added or cancelled. Claims 1-15 and 31- 44 are pending in the application. Reconsideration is respectfully requested in light of the following remarks.

Section 112, First and Second Paragraph Rejections:

The Office Action rejected claims 5-11 under 35 U.S.C. § 112, first paragraph, alleging that the specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make or use the invention commensurate in scope with these claims. Applicants respectfully traverse this rejection for at least the reasons below.

Specifically, the Examiner contends that the specification does not appear to teach using color saturation, drop shadow, animation, “text rendering indicator”, font size, sound volume, blink rate, background blending level or shimmer level to select a third non-positional rendering attribute.

First of all, Applicants respectfully remind the Examiner that the test of enablement, as described in the M.P.E.P at section 2164.01, is whether the disclosure in an application contains sufficient information regarding the subject matter of the claims as to enable one skilled in the pertinent art to make and use the claimed invention without undue experimentation. As shown below, the subject matter of claims 5 –11, rejected by the Examiner, is described in Applicant’s specification and drawings sufficiently to allow someone skilled in the art to make and use the present invention, including the respective limitations of claim 5 –11, without undue experimentation.

Applicants direct the Examiner’s attention to FIG. 1 and the accompanying text starting on page 8 of the Specification. As described in the Specification, FIG. 1 illustrates an embodiment of the present invention. As described on page 10 of the

Specification, graph 30 of FIG. 1 illustrates one example of a method for determining a third non-positional rendering attribute (level of detail in this exemplary embodiment) using a first and second non-positional rendering attributes (opacity and size, respectively). In the embodiment illustrated by FIG. 1, objects are logically grouped into regions according to their respective levels of the first and second non-positional attributes. For example, objects having a size of 90% to approximately 160% and low opacity and objects having a 5% - 40% size with 100% opacity fall within a region 16 of graph 30 and thus may, in this exemplary embodiment, be rendered with a medium level of detail. Thus, a third non-positional attribute (in this example, level of detail) may be determined using the first and second non-positional attributes (size and opacity). Thus, different rendering attributes may be used together to define regions corresponding to particular levels of a third rendering attribute according to one exemplary embodiment of the present invention. The specification states that a third non-positional rendering attribute may be selected as a function of a first two non-positional rendering attributes.

The Specification at page 11 lines 10-16 provides examples of using other non-positional attributes with the exemplary embodiment described above. For instance, while size and opacity are used, as an example, in graph 30 of FIG. 1 to determine levels of detail, other attributes, such as brightness or color may be used, in other example and other embodiments. Furthermore, the Specification clearly teaches and supports the use of color saturation, drop shadow, animation, "text rendering indicator", font size, sound volume, blink rate, background blending level or shimmer as the first and second non-positional attributes (see, e.g. page 4, lines 14-21 and page 18, line 21 – page 19, line 3). Thus, the present invention is not limited to the example described above or those particular exemplary embodiments described in the Specification.

FIG. 2 illustrates another exemplary example described in the Specification. As described starting on page 11, line 18 of the Specification, a computer network diagram may render icons for network devices using opacity and size to indicate the amount of traffic generating by each particular computer. In this example embodiment, graphic

icons representing the computers on the network may be rendered using differing levels of details based on the values of opacity and size.

Similarly, FIG. 6 and accompanying text (starting on page 15 of the Specification) describe other exemplary embodiments of the present invention. FIG. 6 illustrates an example application in which houses are rendered according to various non-positional attributes. For instance, houses may be colored or tinted according to their asking price. Additionally, houses may be rendered with varying opacity, brightness or level of detail to indicate whether or not they are for sale. The level of detail used to render houses in this example may be varied depending upon the other non-positional attributes, such as asking price and whether or not the particular house is for sale.

Applicants assert that one skilled in the pertinent art would be able, based upon Applicant's specification, to make and use the present invention without undue experimentation using other attributes types at the first and second non-positional attributes when determining a third non-positional attribute. For example, Applicants submit that one skilled in the art would have no trouble substituting any of the attributes referred to by the Examiner for either size or opacity in the above exemplary embodiment. For example, claim 7 recites, "wherein the first non-positional rendering attribute is font size." Applicants submit that in the above example regarding the rendering of graphic objects representing computers on a network, font size could be used in place of opacity to both indicate a corresponding amount traffic generated by a particular computer and, in conjunction with another non-positional rendering attribute such as blink rate, to determine a third non-positional rendering attribute, such as a level of detail. One skilled in the art would clearly be able to implement the present invention using the non-positional rendering attributes recited in claims 5 –11 without undue experimentation.

For at least the reasons above, Applicant respectfully requests removal of the Section 112, First Paragraph, rejection of claims 5 –11.

The Office Action rejected claim 5 under 35 U.S.C. § 112, second paragraph as being indefinite. Claim 5 has been amended as suggested by the Examiner.

Section 102(b) Rejection:

Claims 1-4, 7, 12, 31, 35 and 38 were rejected under 35 U.S.C. § 102(b) as being disclosed by Cunniff (U.S. Patent 5,945,992). Applicant respectfully traverses the rejection of claims 1-4, 7, 12, 31, 35 and 38 for at least the following reasons.

In regard to claim 1, the Examiner states that the position coordinates of objects in Cunniff correspond to the first data value and second data value for each object as recited in Applicant's claim 1. The Examiner then asserts that Cunniff teaches using the position coordinates for each object to assign each object a bounding geometry. The Examiner further states that the bounding geometry implicitly includes a size and shape which would correspond to the first non-positional rendering attribute and the second non-positional rendering attribute recited in claim 1. The Examiner's interpretation of Cunniff is clearly incorrect on several points. First, Cunniff does not teach using the position coordinates for each object to assign each object a bounding geometry. To the contrary, Cunniff mentions no relationship whatsoever between an object's position and its bounding geometry.

Second, the bounding geometry in Cunniff is not a non-positional rendering attribute (let alone first and second non-positional rendering attributes). Cunniff teaches that the bounding geometry is used by the server to prune unnecessary objects before sending data to the client. The only example of a bounding geometry described in Cunniff is a bounding sphere (see data structure at top of col. 4 and lines 21-26 of col. 4). The bounding sphere is defined by a single "Radius" attribute. Cunniff teaches that the bounding sphere information is used to perform "View Cone Elimination" (see col. 5, line 60 through col. 6, line 57; Figs. 6-8). As described in Cunniff, View Cone Elimination is used to prune unnecessary object data before sending data to the client. Thus, the bounding geometry (sphere) in Cunniff is only used for the pruning process at

the server. The bounding geometry discussed in Cunniff is not used to render the object at the client. Thus, contrary to the Examiner's assertion, the bounding geometry described in Cunniff is not a rendering attribute, and is certainly not a first non-positional rendering attribute and a second non-positional rendering attribute.

In regard to the element of "using the first and second non-positional rendering attributes to select a third non-positional rendering attribute" recited in claim 1, the Examiner cites col. 2, lines 12-22 of Cunniff. In particular, the Examiner underlines the phrases "position", "its bounding geometry" and "opaque radius". However, as used in Cunniff, none of these are non-positional rendering attributes. By definition "position" cannot be considered to be a non-positional rendering attribute. Furthermore, as shown above, "bounding geometry" in Cunniff is used for object pruning and is not a rendering attribute. Likewise, the "opaque radius" in Cunniff is used for object pruning to perform the "Obscured Object Rejection test" (see col. 6, line 62 through col. 7, line 65, and Fig. 9). The "bounding geometry" and "opaque radius" are only used in Cunniff for object pruning. As stated in the same section of Cunniff cited by the Examiner, the entire purpose of object pruning is to eliminate objects from the rendering process. The "bounding geometry" and "opaque radius" in Cunniff have absolutely nothing to do with how a given object is actually rendered by the client. Thus, by definition, they are not rendering attributes.

The Examiner also refers to the following sentence at col. 2, lines 16-19 of Cunniff: "In addition, based upon their distance from the observer and upon their size, a level of detail based culling operation which would render small, distant objects at lower detail, or invisible, could be provided." However, "distance from the observer" is clearly a positional attribute. Thus, the "level of detail based culling operation" in Cunniff clearly does not involve using first and second non-positional rendering attributes to select a third non-positional rendering attribute. In fact, Cunniff's level of detail based culling operation that is based on distance from the observer is exactly the type of prior art that Applicant distinguishes from at p. 3, lines 5-23 of Applicant's specification.

At the top of p. 6 of the Office Action, the Examiner states, “[a]lthough claim 1 alleges ‘using the first and second non-positional rendering attributes to select a third non-positional rendering attribute’, the applicant’s specification in para. [0011] states: ‘These first and second data values (or the first and second non-positional rendering attributes) may be used to select a third non-positional rendering attribute.’” The Examiner further states, “[c]onsequently, even the first and second data values ‘position’ may be used to select a third non-positional rendering attribute.” However, Applicant’s specification does not define the first and second data values as being “position” values. Instead, Applicant’s specification states that the first and second data values are used to assign non-positional rendering attributes to the object. Moreover, as shown above, the position coordinates in Cunniff are not used to assign the bounding geometry (which the Examiner equates (erroneously) to non-positional attributes).

Thus, for at least the reasons presented above, the rejection of claim 1 is not supported by the cited art and removal thereof is respectfully requested.

In regard to claim 3, Cunniff fails to disclose wherein the second non-positional rendering attribute is opacity. Instead, Cunniff describes an object’s opaque radius, not its opacity. Cunniff defines an object’s opaque radius as a radius that obscures all objects that are behind the object (Cunniff, column 4, lines 21-26). Additionally, an object’s opaque radius is not used, along with another non-positional rendering attribute, to select a third non-positional rendering attribute. Instead, Cunniff teaches that an object’s opaque radius is used to cull other objects that are obscured by the first object based upon the first object’s opaque radius. Cunniff does not using an object’s opacity as a non-positional rendering attribute to select a third non-positional rendering attribute. Cunniff uses the opaque radius not as a rendering attribute, but for culling one object based upon another object’s opaque radius before the data for rendering is even sent to the client. Thus, the rejection of claim 3 is not supported by the prior art and removal thereof is respectfully requested. Similar remarks also apply to claim 35.

Regarding claim 7, Cunniff does not disclose wherein the first non-positional rendering attribute is font size. The Examiner argues that by disclosing a graphic object's total size Cunniff is also disclosing font size. Applicants respectfully disagree. Nowhere does Cunniff mention font size. Nowhere does Cunniff mention that graphic objects may be fonts. The Examiner is merely speculating as to the details of Cunniff's system, which is clearly improper in a rejection based on anticipation (i.e. a rejection under § 102b). Without some specific teaching regarding font and font sizes, Cunniff cannot be said to anticipate claim 7. Thus, the rejection of claim 7 is not supported by the prior art and removal thereof is respectfully requested. Similar remarks also apply to claim 38.

Section 103(a) Rejections:

The Office Action rejected claims 10 and 41 under 35 U.S.C. Section 103(a) as being unpatentable over "Cunniff in view of Clavadetscher (U.S. Patent 6,429,875)." However, the text of the rejection and the patent number specified by the Examiner refer to Pettigrew. Similarly, the Office Action rejection claims 11 and 42 as being unpatentable over Cunniff in view of Pettigrew et al. (U.S. Patent 6,429,875). However the text of the rejection refers to the Clavadetscher reference. Thus, Applicants assume the Examiner intended to reject claims 10 and 41 in view of Pettigrew and to reject claims 11 and 42 in view of Clavadetscher (Publication No. 2003/0076321).

However, Clavadetscher is not a prior art reference. The Clavadetscher reference (Publication No. 2003/0076321) was filed on October 23, 2001 after Applicant's filing date of October 3, 2001. Thus, the rejection of claim 11 and 42 (or, alternatively, claims 10 and 41) is clearly improper and removal thereof is respectfully requested.

Claims 5, 13-15, 34, 43 and 44 were rejected under 35 U.S.C. Section 103(a) as being unpatentable over Cunniff in view of Robbins (U.S. Patent 6,819,344), claims 6, 8, 37 and 39 as being unpatentable over Cunniff in view of van Dantzich et al. (Publication

No. 2002/0054117) (hereinafter “Dantzich”), claims 9 and 40 as being unpatentable over Cunniff in view of Sheasby et al. (Publication No. 2002/0008704) (hereinafter “Sheasby”), claim 32 as being unpatentable over Cunniff in view of Crotty et al. (Publication No. 2002/0050995) (hereinafter “Crotty”), claim 33 as being unpatentable over Cunniff in view of Buchner et al. (U.S. Patent 5,471,572) (hereinafter “Buchner”), claim 36 as being unpatentable over Cunniff as in view of Berend et al. (U.S. Patent 5,598,182) (hereinafter “Berend”). Applicant respectfully traverses the rejection of these claims for at least the reasons presented above regarding their respective independent claims.

Regarding the § 102(b) and § 103(a) rejections, Applicant also asserts that the rejections of numerous ones of the dependent claims are further unsupported by the cited art. However, since the rejections have been shown to be unsupported for the independent claims, a further discussion of the dependent claims is not necessary at this time. Applicant reserves the right to assert additional arguments at a later time if necessary.

CONCLUSION


In light of the foregoing remarks, Applicant submits the application is in condition for allowance, and notice to that effect is respectfully requested.

If any extension of time (under 37 C.F.R. § 1.136) is necessary to prevent the above referenced application from becoming abandoned, Applicant hereby petitions for such extension. If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert & Goetzel PC Deposit Account No. 50-1505/5181-80300/RCK.

Also enclosed herewith are the following items:

- ☒ Return Receipt Postcard
- ☐ Information Disclosure Statement

Respectfully submitted,


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